

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An image sensing apparatus comprising:

an image sensing unit, which includes a honeycomb-type solid-state electronic image sensor, for sensing an image of a subject to thereby output image data representing the image of the subject, said honeycomb-type solid-state electronic image sensor having a number of photoelectric transducers disposed in column and row directions, wherein the photoelectric transducers for odd-numbered columns are placed in odd- or even-numbered rows and the photoelectric transducers for even-numbered columns are placed in even- or odd-numbered rows;

a first recording controller for recording image data, which is output from said image sensing unit, on a recording medium; and

a second recording controller for recording data, which represents characteristics based on a structure of on-chip lenses or inner lenses of the honeycomb-type solid-state electronic image sensor such that the image data is corrected using the characteristic data when the image data is reproduced, on the recording medium in association with the image data.

2. (Previously Presented) The apparatus according to claim 1, further comprising a storage device for storing the data representing the characteristics;

wherein said second recording controller records the data representing the characteristics on a storage medium, said data being read out of said storage device.

3. (Currently Amended) A method of controlling operation of an image sensing apparatus, comprising the steps of:

sensing an image of a subject and obtaining image data representing the image of the subject using a honeycomb-type solid-state electronic image sensor having a number of photoelectric transducers disposed in column and row directions, wherein the photoelectric transducers for odd-numbered columns are placed in odd- and even-numbered rows and the photoelectric transducers for even-numbered columns are placed in even- or odd-numbered rows;

recording the obtained image data on a recording medium; and

recording data, which represents characteristics based on the structure of on-chip lenses or inner lenses of the honeycomb-type solid-state electronic image sensor such that the image data is corrected using the characteristic data when the image data is reproduced, on the recording medium in association with the image data.

4. (Canceled)

5. (Previously Presented) The image sensing apparatus according to claim 1, wherein said second recording controller further records data representing circuit characteristics based on the use of the honeycomb-type solid-state electronic image sensor on the recording medium.

Claims 6-7. (Canceled)

8. (Previously Presented) The method according to claim 3, wherein said step of recording data further records data representing circuit characteristics based on the use of the honeycomb-type solid-state electronic image sensor on the recording medium.

9. (Canceled)

10. (Previously Presented) The apparatus according to claim 1, wherein the characteristics based on the structure of on-chip lenses or inner lenses includes on-chip-lens curvature.

11. (Previously Presented) The apparatus according to claim 1, wherein the characteristics based on the structure of on-chip lenses or inner lenses includes index of refraction and position of the on-chip or inner lenses.

12. (Previously Presented) The apparatus according to claim 1, wherein the characteristics based on the structure of the on-chip lenses or inner lenses includes inner-lens curvature.

13. (Previously Presented) The apparatus according to claim 1, wherein the characteristics based on the structure of the on-chip lenses or inner lenses is aberration.

14. (Previously Presented) The apparatus according to claim 13, wherein the aberration is distortion.

15. (Previously Presented) The apparatus according to claim 13, wherein the aberration is chromatic magnification.

16. (New) The apparatus according to claim 1, wherein the data representing the characteristics is recorded on the recording medium such that signal processing of the image data using said characteristics can be performed at a time of image data playback.

17. (New) The apparatus according to claim 1, wherein the data representing the characteristics is recorded on the recording medium such that signal processing of the image data using the characteristics can be performed by loading said characteristics into a device other than the image sensing apparatus.

18. (New) The method according to claim 3, wherein the step of recording data includes recording the data representing the characteristics on the recording medium such that signal processing of the image data using said characteristics can be performed at a time of image data playback.

19. (New) The method according to claim 3, wherein the step of recording data includes recording the data representing the characteristics on the recording medium such that signal processing of the image data using the characteristics can be performed by loading said characteristics into a device other than the image sensing apparatus.